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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,697	11/25/2003	Allan P. Thompson	2507-5776.2US (21595-US-0)	6301
60794 7590 04/11/2008 TRASKBRITT, P.C./ ALLIANT TECH SYSTEMS P.O. BOX 2550 SALT LAKE CITY, UT 84110				
EXAMINER				
THOMPSON, CAMIE S				
ART UNIT		PAPER NUMBER		
1794				
NOTIFICATION DATE		DELIVERY MODE		
04/11/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTOMail@traskbritt.com

# Office Action Summary

**Application No.**

10/721,697

**Applicant(s)**

THOMPSON ET AL.

**Examiner**

Camie S. Thompson

**Art Unit**

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on RCE filed 3/28/08.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-6, 8 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8, 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**Primary Examiner, Art Unit 1794DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 28, 2008 has been entered.
2. Applicant's amendment and accompanying remarks filed March 28, 2008 are acknowledged.
3. Examiner acknowledges amended claims 1-6, 8 and 11-14.
4. Examiner acknowledges cancelled claims 7 and 9-10.
5. Examiner acknowledges newly added claim 15.
6. The rejection of claims 1 and 4 under 35 U.S.C. 102(b) as being anticipated by Chi et al., U.S. Patent Number 4,460,640 is overcome by applicant's amendment.
7. The rejection of claims 1-6, 8 and 11-14 under 35 U.S.C. 102(e) as being anticipated by Klett et al., U.S. Patent Number 5,744,075 is overcome by applicant's amendment.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-6, 8 and 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Herring, U.S. Patent Number 4,504,532 in view of Klett et al., U.S. Patent Number 5,744,075. Herring discloses a blast tubes for rocket motors wherein the blast tubes comprise phenolic insulators that are rigid, low density bodies that comprise inorganic particulate and fibrous reinforcement in a phenolic resin as per instant claims 1-3, 11-13 and 15(see column 2, lines 1-13). Additionally, the reference discloses that the fibrous reinforcement can be selected from carbon fibers or polyaramide fibers or pulp as per instant claims 4-6 (see column 2). Table II of the reference discloses the tensile strength of the blast insulators as per instant claims 11-12. Herring discloses that the density of the phenolic insulator is 0.050-0.570 pounds per cubic inch (1.38-1.57 g/ml). Although Herring does not disclose the same specific density as the present claims, Herring does disclose that the phenolic insulators have low density. The lower density provides better char rate. Additionally, Herring does not disclose a filler material such as carbon powder, powdered aluminum trihydrate or antimony oxide. Klett discloses a fibrous preform wherein the preform comprises carbon fibers that can be rayon or polyacrylonitrile fibers (see reference claims 1 and 3). Additionally, the reference discloses that the preform comprises carbonizable organic powder (see reference claim 1). Klett discloses that the matrix material is a phenolic resin (see column 4, lines 4-8). Also, the Klett reference discloses that the fibrous preform has a density of 1.0 g/ml. The carbonizable powder affects the density of the fibrous pre-form. Therefore, it would have been obvious to one of ordinary skill in the art to use carbonizable powder in the Herring reference in order to obtain a density of 1.00 to 1.15 g/ml for a phenolic insulator for a rocket motor that has better performance.

***Response to Arguments***

10. Applicant's arguments with respect to the present claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Camie S. Thompson whose telephone number is (571) 272-1530. The examiner can normally be reached on Monday through Friday from 7:30 am to 4:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached at (571) 272-1478. The fax phone number for the Group is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Bruce H Hess/

Primary Examiner, Art Unit 1794